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To: Chicago Community Trust and Lead Agencies

Date: October 21, 2008

From: Bob Dean, Principal Regional Planner

Re: Draft Population Projections - MODIFIED

Please note that the memo dated October 1 concerning population projections is now outdated. The Census has released new projections, which are the basis for the CMAP projections, and this has required us to update our figures. In particular, the Census increased its projection of the nation's Hispanic population in 2040 from 88 million to 108 million; this has major implications for our projections.

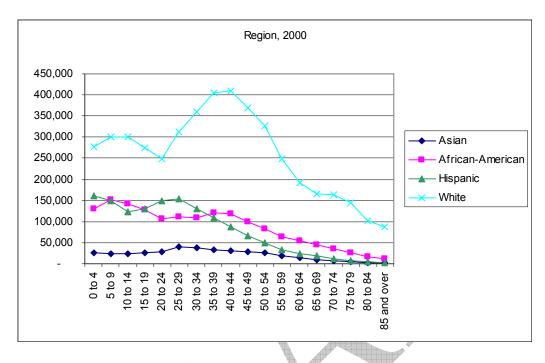
To support the work of the lead agencies involved in researching human and community development topics for the *GO TO 2040* plan, CMAP staff have prepared draft population estimates for 2040. These were prepared based on national Census forecasts scaled down to the Chicago metropolitan area. These numbers should be treated as rough estimates only, and are suitable for providing basic ideas about the region's population in 2040 if current trends continue, *not* for making detailed investment or policy decisions.

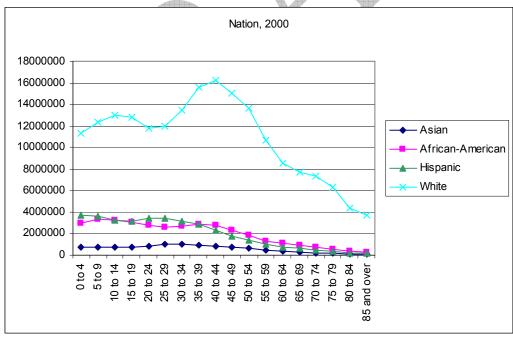
Please also note that this document provides overall regional projections. CMAP recognizes that there will be considerable variation between different parts of the region. More detailed projections by geography will be prepared to be released when the *GO TO* 2040 plan is adopted in 2010.

This document provides an overview of population changes nationally and regionally for major age and racial/ethnic groups. The raw estimates are provided on page 13 for any group that is interested in performing additional analysis. However, please note the caveats above before conducting any detailed analysis of this rough data.

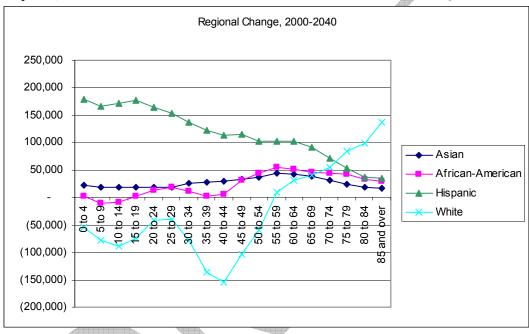
A separate memo will be provided concerning employment projections for the region.

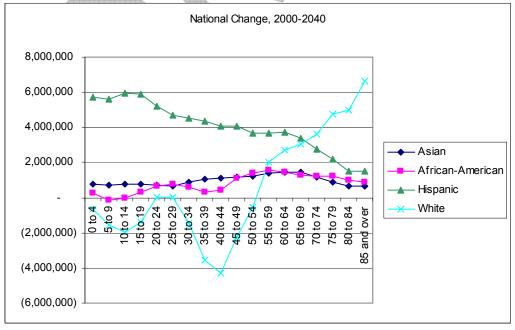
As shown below, the Chicago metropolitan area's distribution of population in 2000 was similar in many ways to the nation's. The major difference was the higher proportion of Black and Hispanic population in the region. Beyond this, the age breakdowns for each racial group are quite similar to the nation as a whole.



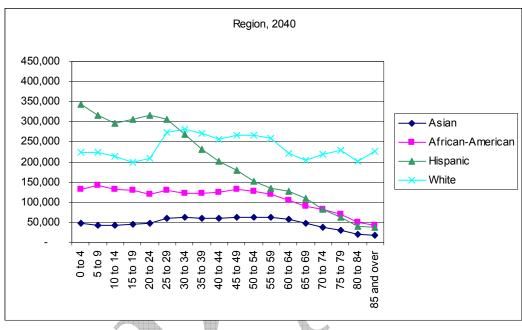


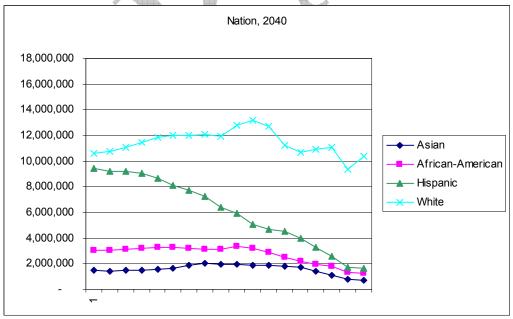
The region is assumed to change in a similar way to the nation between 2000 and 2040. As shown below, in the nation, the Hispanic population is projected to increase dramatically in most age ranges, particularly under age 70. The Asian population is projected to increase consistently in all age ranges, and the Black population is projected to have its highest increases above age 45 with stability or small decreases in some younger age groups. The White population is projected to experience significant declines in ages under 20 and between ages 30 and 50, and very large increases among the older population. Regional population changes are expected to be similar to these national trends, although the region is expected to grow at a lower rate than the nation as a whole. Its projections are also affected by its initial higher concentration of minority, particularly Hispanic, residents.





Projected population in 2040 is shown below, for both the region and the nation. As it shows, the region will continue to have similar characteristics to the nation as a whole, though with higher minority populations, reflecting the fact that its minority population is currently above national averages. Also, the White population under 25 is projected to continue to be lower than the national average, reflecting current conditions. As will be covered further in the following pages, the Hispanic population is projected to exceed the White population in a number of age ranges in the region, but not in the nation as a whole.





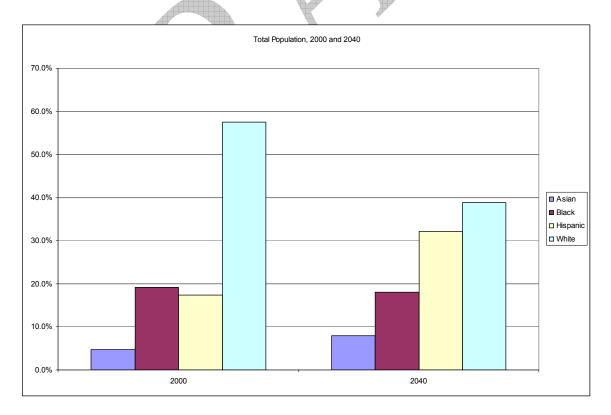
In the following pages, more detailed descriptions of population change are provided for five age groups: 0-4 years, 5-19 years, 20-64 years, 65-84 years, and 85 years and older.

#### **Total population**

Between 2000 and 2040, the region's population is projected to increase from 8.1 million to 10.9 million residents, a growth of nearly 2.8 million people and a 34% increase from 2000 figures. The highest amount of growth is projected to occur in the region's Hispanic population, which will grow by nearly 150% (compared to a national growth rate of 204%). The region's Asian population is also projected to have a high rate of growth, but the absolute growth is much smaller than the Hispanic population's growth. The Black population is projected to increase at a slightly lower rate than the regional average. A slight decline is projected in the region's White population.

	2000	2040	change	% change
Total	8,146,264	10,900,000	2,753,736	34%
Asian	379,210	863,034	483,824	128%
Black	1,555,731	1,971,194	415,463	27%
Hispanic	1,409,202	3,504,659	2,095,457	149%
White	4,687,259	4,237,893	(449,366)	-10%

Because of these different growth rates, the overall composition of the region's population will change. Most notably, the White population is projected to fall from over 57% to approximately 39% of the region's population, while the Hispanic population rises from 17% to 32%.

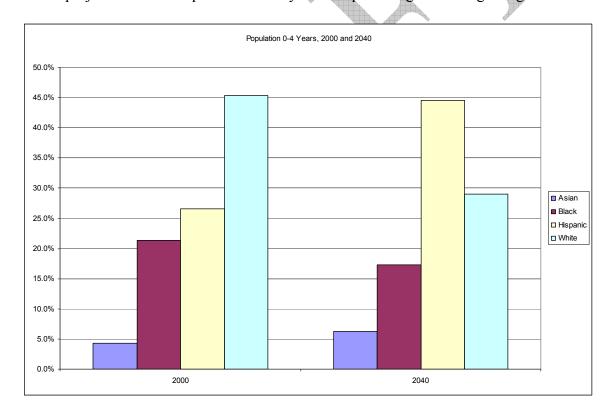


#### 0-4 years of age

The region's population of children in the 0-4 age range is projected to grow from 610,000 to 768,000, an increase of 26%. Like the overall population, growth is highest among the Hispanic population, which is projected to make up most of the increase in this age range. The White population in this age range is projected to decline, with very low growth in the Black population.

	2000	2040	change	% change
Total	609,777	767,854	158,077	26%
Asian	26,137	47,841	21,704	83%
Black	130,342	133,003	2,661	2%
Hispanic	162,143	341,956	179,813	111%
White	276,855	223,139	(53,716)	-19%

It is projected that there will be more Hispanic than White children in this age group by 2040, due to these different rates of increase. The Black population in the 0-4 age range is also projected to make up a considerably smaller percentage of this age range in 2040.



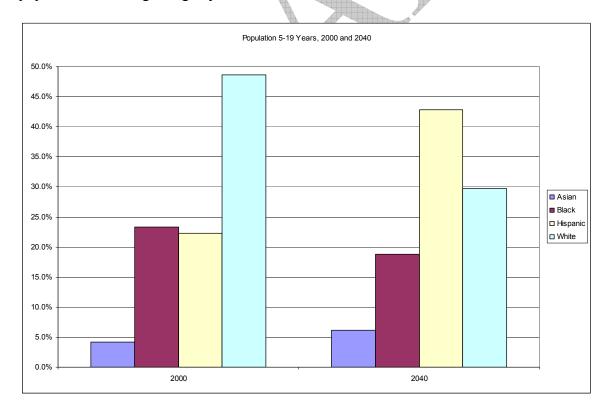
#### 5-19 years of age

The region's population of residents in the 5-19 age range is projected to increase from 1.8 million to approximately 2.1 million between 2000 and 2040. This is a growth rate of only 19%, a lower rate of growth than the overall regional population. In other words, the proportion of the region's residents who are school-age is projected to be lower in 2040 than it was in 2000

The Hispanic population is projected to increase both by the greatest absolute numbers and the highest rate, and in fact, the region's population in this age range would be projected to shrink considerably if not for the growth in the Hispanic population. The White population is projected to fall substantially, by 28%, and the Black population is projected to decrease by 4%.

	2000	2040	change	% change
Total	1,805,666	2,142,460	336,794	19%
Asian	74,485	131,241	56,756	76%
Black	421,413	403,377	(18,036)	-4%
Hispanic	401,240	916,795	515,555	128%
White	876,874	635,446	(241,428)	-28%

As with the 0-4 age range, the Hispanic population is projected to exceed the White population in this age range by 2040.

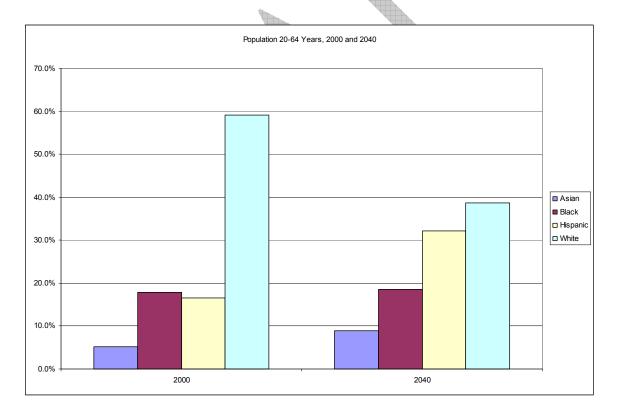


#### 20-64 years of age

The region's population between ages 20 and 64 is projected to grow from approximately 4.9 million in 2000 to nearly 6 million in 2040, a growth rate of 22%, which is below the regional average. As with most other age ranges, the Hispanic population is expected to grow the fastest, adding over 1 million residents in this age range between 2000 and 2040, while the White population is projected to decline.

	2000	2040	change	% change
Total	4,855,634	5,945,528	1,089,894	22%
Asian	253,868	529,803	275,935	109%
Black	868,492	1,103,002	234,510	27%
Hispanic	801,338	1,914,351	1,113,013	139%
White	2,870,389	2,300,838	(569,551)	-20%

According to these projections, the White population will no longer make up a majority of the population between 20 and 64 in 2040, but will continue to make up a larger proportion of this age range than any other race. The proportions of this age range made up of Asian, Black, and Hispanic residents are all projected to increase between 2000 and 2040.

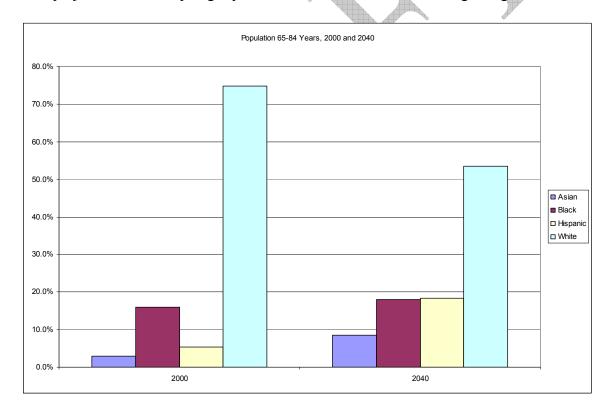


#### 65-84 years of age

The number of residents in the 65-84 age range is projected to nearly double between 2000 and 2040, from 770,000 to nearly 1.6 million. The largest absolute increase but smallest percentage increase is projected among the White population, which is projected to increase by 48%. Both the Asian and the Hispanic populations in this age range are projected to increase by well over 400%.

	2000	2040	change	% change
Total	769,047	1,597,363	828,316	108%
Asian	23,075	135,719	112,644	488%
Black	122,556	288,870	166,314	136%
Hispanic	41,563	293,155	251,592	605%
White	575,241	853,189	277,948	48%

The White population is projected to continue to make up over 50% of the population in the 65-84 age range in 2040, followed by the Hispanic and Black population, which are each projected to make up slightly less than 20% of the total in this age range.

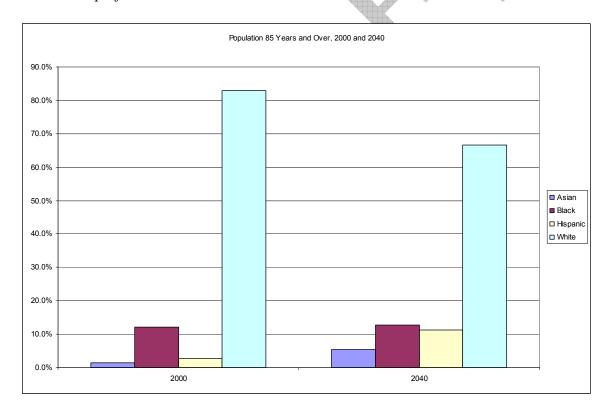


#### 85 years of age and older

The number of residents in the region who are over 85 is projected to more than triple, from just over 106,000 in 2000 to nearly 338,000 in 2040. All racial groups are projected to more than double their populations in this age range, and Asian and Hispanic populations will increase more than ten times, although their figures in 2000 were fairly small.

	2000	2040	change	% change
Total	106,140	337,795	231,655	218%
Asian	1,645	18,430	16,785	1020%
Black	12,928	42,942	30,014	232%
Hispanic	2,918	38,403	35,485	1216%
White	87,900	225,280	137,380	156%

In 2040, nearly 70% of the region's residents who are age 85 or older are projected to be White, compared to just over 80% in 2000. The proportion of residents in this age range who are Black is projected to stay constant, while the proportion of Asian and Hispanic residents is projected to increase.



#### **Appendix: Data Sources and Methodology**

Based on extrapolation from 2030, CMAP's total population in 2040 is estimated at 10.9 million. Other methods of estimation may yield different results. The figures in this document are based on a total population of 10.9 million.

Population breakdown by race and age is based on national projections available from the US Census. Breakdowns have been provided for four groups: Asian, Black, Hispanic, and White Non-Hispanic (which is termed "White" in this document). These figures do not sum to exactly 100%, as these categories include nearly 99%, but not all, of the region's residents. These categories are consistent with those used by the Census for purposes of population projection.

These breakdowns are customized for the Chicago metropolitan area by adjusting for the differences between this region and the national average in 2000. The figures in this document are therefore adaptations of Census's projections scaled to this region, rather than the result of a separate projection effort by CMAP. Census forecasts are available here: <a href="http://www.census.gov/population/www/projections/downloadablefiles.html">http://www.census.gov/population/www/projections/downloadablefiles.html</a>

Three different methods were used to apply the Census figures to the Chicago region. Each of these methods applies the national changes that the Census forecasts to the region in a slightly different way. These include:

• The *first method* assumes comparable rates of growth for each age and race group in the region as for the nation as a whole. For example, the Census forecasts that the nation's population of Hispanic children from 0-4 years of age will increase by 152% between 2000 and 2040, while the population of White children in the same age range will decrease by 6%. These figures were applied to the Chicago region.

However, the nation is projected to grow at a faster rate than the region (44% versus 34%). Therefore, the projections for each age and race category were reduced proportionally to reduce the overall regional population to 10.9 million, our estimate of what it will be in 2040. To continue the above example, this leads to an estimate of approximately 354,000 Hispanic children and 225,000 White children from ages 0-4 in the region in 2040.

• The *second method* tracks the change in the proportion of the population in each age and race category. For example, the Census estimates that 1.33% of the nation's total population in 2000 were Hispanic children from 0-4 years of age; they also forecast that this group will make up 2.33% of the nation's population in 2040. This is a shift in this group's percentage of the total population of +1.00%. At the same time, the proportion of the nation's population is made up of White children from 0-4 years of age is projected by the Census to decrease from 4.00% to 2.61% from 2000 to 2040, a shift of -1.39%.

These figures were then applied to the region's population in 2000. In that year, Hispanic children from 0-4 years of age made up 1.99% of the region's population, and White children in that age range made up 3.40% of the population. These changes projected by the Census were then applied to these figures, leading to the result that 2.99% of the region's population in 2040 was projected to be Hispanic children from 0-4 years of age, compared to 2.02% for White children in the same age range. Applying this to the regional projection of 10.9 million residents in 2040, this yields an estimate of 326,000 Hispanic children and 220,000 White children from ages 0-4 in the region in 2040.

• A *third method* combines these approaches, with the first method being used to estimate overall population by race, and the second method used to estimate population by age within each racial category. This leads to results between methods 1 and 2, and projects that in 2040, the region will have 345,000 Hispanic children and 224,000 White children between the ages of 0-4 years.

Each of these methods is reasonable, but they do yield somewhat different results, particularly in the very young and very old age ranges. However, they all show the same overall trends. Rather than select one method, an average was created of the three methods, and these average figures were presented throughout this document.

As emphasized in the introduction to this document, there is considerable uncertainty in projecting the region's characteristics in 2040, and these projections should be treated as rough estimates only. These numbers should *not* be used for making budgeting, programming, or policy decisions, but instead to identify major demographic trends that are expected to occur between now and 2040.



# **Appendix: Raw Data**

## 2000

	Total	0.4- 4	54-0	10 to	15 to	20 to	25 to	30 to 34	35 to 39	40 to	45 to 49	50 to 54	55 to 59	60 to	65 to	70 to 74	75 to	80 to	85 and
	Total	0 to 4	5 to 9	14	19	24	29	34	39	44	49	34	39	64	69	/4	79	84	over
Total	8,146,264	609,777	638,317	600,609	566,740	543,936	626,235	646,361	674,544	654,185	568,817	488,389	366,929	286,238	238,267	220,930	184,627	125,223	106,140
Asian	379,210	26,137	24,138	24,288	26,059	29,242	40,596	37,687	32,191	29,754	27,992	24,907	18,224	13,275	8,805	6,730	4,796	2,744	1,645
Black	1,555,731	130,342	152,622	140,994	127,797	107,151	110,441	109,848	119,892	118,989	100,632	83,230	63,875	54,434	44,330	36,525	26,228	15,473	12,928
Hispanic	1,409,202	162,143	148,880	123,203	129,157	149,944	153,461	130,976	108,690	87,264	65,313	48,917	32,692	24,081	17,871	12,572	7,538	3,582	2,918
White	4,687,259	276,855	300,703	301,693	274,478	248,719	312,499	359,210	405,607	410,500	368,315	325,788	248,375	191,376	164,919	163,270	144,543	102,509	87,900

### 2040

	Total	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 and over
Total	10,900,000	767,854	746,891	703,473	692,097	700,833	786,474	752,806	701,469	652,987	645,859	613,285	578,333	513,481	455,070	425,424	397,149	319,721	337,795
Asian	863,034	47,841	42,803	43,360	45,077	47,105	59,363	63,294	60,028	58,901	61,232	61,636	62,013	56,231	48,293	37,768	28,978	20,680	18,430
Black	1,971,194	133,003	141,531	132,059	129,788_	119,776	129,220	121,268	122,851	125,297	132,516	127,921	118,712	105,441	90,222	80,911	69,011	48,726	42,942
Hispanic	3,504,659	341,956	315,865	294,891	306,038	314,993	306,764	267,545	231,103	200,662	179,728	152,039	135,164	126,353	108,498	83,248	61,465	39,945	38,403
White	4,237,893	223,139	222,652	213,435	199,359	207,937	273,683	280,998	270,025	256,673	265,350	266,684	257,598	221,891	204,953	218,004	229,253	200,979	225,280